

WHAT IS CLAIMED IS:

1. A system for handling packet communications from three entities in a packet communications network, the system comprising:
first and second ports for establishing first and second links to transfer packet communications to and from the first and second entities, respectively;

first and second packet connections for interconnecting the first and second links, respectively, to an audio server;

a third link for transferring packet communications to and from the third entity and the audio server;

the audio server for manipulating the packet communications received from the first, second, and third entities and providing the manipulated packet communications to the first, second, and third entities.

2. The system of claim 1 wherein the manipulation performed by the audio server is combining the packet communications to provide an n-way call.

3. The system of claim 1 wherein the manipulation performed by the audio server is selectively routing the packet communications to provide a call-waiting service.

4. The system of claim 1 wherein the packet communications is a packet voice call.

5. The system of claim 1 wherein the first and second links are connected to separate and detached media gateways.

6. The system of claim 1 wherein the first link is a connection to a radio access network.

7. The system of claim 1 wherein the packet communications network is a Code Division Multiple Access (CDMA) network and the first entity is a cellular telephone connected to the system via a radio access network.

8. The system of claim 1 wherein the second link is connected to the second entity via a circuit-switched network.

9. The system of claim 1 wherein node is connected to a circuit-switched voice network.

10. The system of claim 1 wherein the audio server is a software routine.

11. The system of claim 1 wherein the audio server is a separate processing node of the network.

12. A media gateway comprising:
first and second call ports for transmitting and receiving packet call information;
a processor for performing instructions response to call-handling control information; and
a memory for storing a plurality of instructions, wherein the instructions include:
instructions, upon receipt of three-way call control information, for routing packet call information from the first and second call ports to an audio server; and
instructions for directing the audio server to combine the packet call information from the first and second call ports with call information from a third entity.

13. The media gateway of claim 12 wherein the instructions further include:

instructions for transmitting the combined packet call information to the first and second call ports.

14. The media gateway of claim 12 wherein the first and second call ports are connected to two different media gateways.

15. An anchor media gateway comprising:
a control interface for receiving control information;
first and second call ports for transmitting and receiving packet call information from first and second media gateways, respectively;
a processor for performing instructions responsive to received control information; and
a memory for storing a plurality of instructions, wherein the instructions include:

instructions for routing packet call information between the first and second call ports;

instructions, upon receipt of control information, for routing the packet call information to an audio server, the audio server further connected to a third media gateway for transmitting and receiving packet call information there from;

instructions, upon receipt of the control information, for modifying at least a subset of the packet call information received by the audio server; and

instructions, upon receipt of the control information, for routing the modified subset of the packet call information to the second media gateway.

16. The anchor media gateway of claim 15 wherein the instructions for modifying at least a subset of the packet call information is to selectively drop packet call information from the first media gateway.

17. The anchor media gateway of claim 15 wherein the instructions for modifying at least a subset of the packet call information is to selectively drop packet call information from the third media gateway.

18. The anchor media gateway of claim 15 wherein the instructions for modifying at least a subset of the packet call information is to combine all of the received packet call information from the three media gateways.

19. The anchor media gateway of claim 15 wherein the audio server is separated from the anchor media gateway, and wherein the third media gateway is not connected to the anchor media gateway.

20. A method for handling a request for a three-way call in a packet communications network, the method comprising:

instructing an anchor media gateway to route voice packets between first and second ports connected to first and second media gateways, respectively;

instructing the anchor media gateway to route the voice packets to an audio server, upon receipt of the request for the three-way call;

instructing the audio server to combine the voice packets with voice packets from a third media gateway; and

instructing the anchor media gateway to route the combined voice packets to the first and second ports.

21. The method of claim 20 further comprising:

instructing the anchor media gateway to perform a hard handoff to the second port connected to the second media gateway.

22. A method for handling a request for call-waiting in a packet communications network, the method comprising:

instructing an anchor media gateway to route voice packets between a first port and a second port connected to a first media gateway and a second media gateway, respectively; and

upon receipt of the request for call-waiting, instructing the anchor media gateway to route voice packets between the first port and a third port connected to a third media gateway.

23. The method of claim 22 further comprising:

instructing the anchor media gateway to perform a hard handoff to the second port connected to the second media gateway.